



STIC Search Report

EIC 2100

STIC Database Tracking Number 216028

TO: Dennis Y Myint
Location: RND 3D18
Art Unit: 2162
Tuesday, March 06, 2007

Case Serial Number: 10/699062

From: Carol Wong
Location: EIC 2100
RND-4B28
Phone: 571-272-3513

Carol.Wong@uspto.gov

Search Notes

Dear Ex. Myint:

Attached are the search results for your case.

Color tags mark the patents/articles which appear to be most relevant to the case. Color of tag has no significance. Pls review all documents, since untagged items might also be of interest.

Pls call if you have any questions or suggestions for additional terminology, or a different approach to searching the case.

Thanks, Carol

File with 10/699,062

File 348:EUROPEAN PATENTS 1978-2007/ 200708
(c) 2007 European Patent Office
File 349:PCT FULLTEXT 1979-2007/UB=20070301UT=200;
(c) 2007 WIPO/Thomson

Set	Items	Description	
S1	1	AGGID? ?	
S2	1354671	AGGREGAT? OR GROUP???? OR BATCH?? L???? OR BUNCH???? OR CLUSTER???? OR	1B-
S3	523966	CATALOG? OR CATEGOR??? OR CLASSIF SIFICATION? OR FAMILY? OR FAMILIES O	1S-
S4	342467	ORGANIZ??? OR ORGANIZAT? OR ORGAN USTER????	1L-
S5	17359	KERNEL? ?	
S6	149805	(TRACE? ? OR TRACING OR PERFORM??? OR PERFORMANCE? OR BEHA VIOR? OR BEHAVIOUR? OR BEHAV???) (5N) (DATUM OR DATA OR INFOR MATION)	
S7	232973	(OPERATION?? OR FUNCTION??? OR QUALITY OR RELIAB? OR QOS OR DIAGNOST? OR EVALUAT? OR ASSESS?) (5N) (DATUM OR DATA OR INFOR MATION)	
S8	112884	(ANALYS? OR ANALYT? OR ANALYZ?) (5N) (DATUM OR DATA OR INFOR MATION)	
S9	17758	S2:S4(5N) (ABEND? ? OR FAULT? OR DEFECT? OR ANOMAL? OR DEFICI EN? OR ABNORMA? OR FLAW? OR IMPAIR? OR ABERRA?)	
S10	18929	S2:S4(5N) (MALFUNCTION? OR INOPERA? OR DYSFUNCT? OR DISFUNC T? OR BUG? ? OR ERROR? ? OR DEVIA? OR IRREGULAR?)	
S11	21968	S2:S4(5N) (CORRUPT? OR DEGRAD? OR EVENT? ? OR BIST OR SELF EST? OR SELFDIAGNOS? OR DEBUG? OR BUGGY OR BUG OR BUGS)	
S12	19419	S2:S4(5N)S6:S8	
S13	843	S2:S4(5N)S5	
S14	59674	S2:S4(3N) (ID OR IDS OR IDENTIFIER? ? OR TAG? ? OR LABEL???? OR INDICANT? ? OR INDICAT?R? ? OR DESIGNAT?)	
S15	64861	(S2:S4 OR CLASS??) (3N) (ID OR IDS OR IDENTIFIER? ? OR TAG? ? OR LABEL???? OR INDICANT? ? OR INDICAT?R? ? OR DESIGNAT?)	
S16	18764	(S2:S4 OR CLASS??) (3N) (METATAG? OR METAVALUE? OR INDICIA? ? OR NAME? ?)	
S17	456850	KEY? ? OR CODE OR CODES	
S18	61072	HASH? OR MESSAGE()DIGEST? OR MESSAGEDIGEST? OR DIGEST? ?	
S19	1828	S14:S16(25N)S9:S13	
S20	4118	S14:S16(10N)S17	
S21	171	S19(25N)S20	
S22	1	S21(25N)S18	
S23	1	S22 NOT S1	
S24	7	S19(25N)S18	
S25	6	S24 NOT (S1 OR S23)	
S26	7	S21(25N) (S5 OR OS OR OPERATING()SYSTEM? ?)	
S27	5	S26 NOT (S1 OR S23 OR S25)	
S28	72796	S2:S4(5N) (TRACE? ? OR TRACING OR PERFORM??? OR PERFORMANCE? OR BEHAVIOR? OR BEHAVIOUR? OR BEHAV???)	
S29	238408	S2:S4(5N) (OPERATION?? OR FUNCTION??? OR QUALITY OR RELIAB? OR QOS OR DIAGNOST? OR EVALUAT? OR ASSESS?)	
S30	43143	S2:S4(5N) (ANALYS? OR ANALYT? OR ANALYZ?)	
S31	6067	S14:S16(25N)S28:S30	
S32	27	S31(25N)S18	
S33	61	S31(25N) (S5 OR OS OR OPERATING()SYSTEM? ?)	
S34	13	S31(25N)S5	
S35	32	(S32 OR S34) NOT (S1 OR S23 OR S25 OR S27)	
S36	24	S19(25N)KERNEL? ?	
S37	21	S36 NOT (S1 OR S23 OR S25 OR S27)	
S38	47	S35 OR S37	
S39	29	S38 AND AC=US/PR AND AY=(1963:2003)/PR	
S40	29	S38 AND AC=US AND AY=1963:2003	
S41	29	S38 AND AC=US AND AY=(1963:2003)/PR	
S42	26	S38 AND PY=1963:2003	

Patents

Full Text

s43

37

s39:s42

43/5,K/18 (Item 4 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2007 WIPO/Thomson. All rts. reserv.

01137858 **Image available**

FLOW LABELS

ETIQUETTES DE FLUX

Patent Applicant/Assignee:

NOKIA CORPORATION, Keilalahdentie 4, FIN-02150 Espoo, FI, FI (Residence),
FI (Nationality)

Inventor(s):

RAISANEN Vilho I, Gyldenintie 8 A 20, FIN-00200 Helsinki, FI,

Legal Representative:

WILLIAMS David John (agent), Page White & Farrer, 54 Doughty Street,
London WC1N 2LS, GB,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200459923 A2-A3 20040715 (WO 0459923)

Application: WO 2003IB6410 20031224 (PCT/WO IB03006410)

Priority Application: US 2002329750 20021227

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD
SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE
SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) BW GH GM KE LS MW MZ SD SL SZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class (v7): H04L-012/56

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 7677

English Abstract

There is disclosed a system for monitoring a packet data flow,
comprising: a data flow source element including: determining means
adapted to determine a quality of service identifier for the data flow;
first generating means adapted to generate an encoded value in dependence
on the quality of service identifier; allocating means adapted to
allocate the quality of service identifier and the encoded value to the
flow label for each data packet of the data flow; and transmitting means
for forwarding data packets including flow labels to a routing domain;
and a routing domain interface element including: receiving means for
receiving data packets from the data flow source; second generating means
adapted to generate a further encoded value in dependence on the quality
of service identifier in a flow label of a data packet; comparing means
adapted to compare the further encoded value to the encoded value in the
flow label; and routing means adapted to selectively route the data
packets in dependence on the comparing step.

French Abstract

L'invention concerne un systeme de surveillance d'un paquet de flux de
donnees, comprenant un element source de flux de donnees qui comporte des
moyens de determination concus pour determiner une qualite
d'identificateur de service du flux de donnees ; des premiers moyens de
generation concus pour generer une valeur codee en fonction de la qualite
de l'identificateur de service ; des moyens d'attribution concus pour

attribuer la qualite de l'identificateur de service et la valeur codee a l'etiquette de flux pour chaque paquet de donnees du flux de donnees ; et des moyens de transmission pour transmettre des paquets de donnees comprenant des etiquettes de flux vers un domaine d'acheminement ; et un element d'interface de domaine d'acheminement comportant des moyens de reception afin de recevoir des paquets de donnees de la source de flux de donnees ; des seconds moyens de generation concus pour generer une autre valeur codee en fonction de la qualite de l'identificateur de service dans une etiquette de flux d'un paquet de donnees ; des moyens de comparaison concus pour comparer l'autre valeur codee avec la valeur codee de l'etiquette de flux ; et des moyens d'acheminement concus pour acheminer de maniere selective les paquets de donnees en fonction de l'etape de comparaison.

Legal Status (Type, Date, Text)

Publication 20040715 A2 Without international search report and to be republished upon receipt of that report.
 Examination 20040910 Request for preliminary examination prior to end of 19th month from priority date
 Search Rpt 20041111 Late publication of international search report
 Republication 20041111 A3 With international search report.
 Republication 20041111 A3 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

Fulltext Availability:

Detailed Description

Detailed Description

... service' is

prevented by generating at the QSE a an encoded value, preferably a cryptographic hash value, based in the preferred embodiment on the QoS identifier (i.e. the traffic aggregate identifier ,. such as a IDSCP) and the address of the data source (i.e. the address...

...label 400 in an embodiment of the present invention after allocation of a IDSCP and hash value. The label comprises a QoS identifier or traffic aggregate identifier 502, a hash value 504, and other data 506, which could comprise a per-flow identifier, as discussed...

...for QoS level to be allocated to-a data flow.

2. The QSE determines a QoS identifier or traffic aggregate identifier , such as a DSCP, for the flow corresponding to the QoS level request message, in step 502.

3. The QSE generates a hash value based on the DSCP and the IP address of the server A, in step...

...IP address. For example, two flows from the same source could be allocated the same QoS identifier or traffic aggregate identifier and therefore the same hash value, either simultaneously or sequentially, and thus unique identification of the flow may not be...

43/5,K/35 (Item 21 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2007 WIPO/Thomson. All rts. reserv.

00463114 **Image available**

METHOD AND SYSTEM FOR PROVIDING MULTIMEDIA SERVICE IN AN ATM COMMUNICATIONS NETWORK

PROCEDE ET SYSTEME POUR FOURNIR DES SERVICES MULTIMEDIA DANS UN RESEAU DE

COMMUNICATIONS ATM

Patent Applicant/Assignee:

THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK,
LAZAR Aurel A,
LIM Koon-Seng,
CHAN Mun Choon,
HUARD Jean-Francois,

Inventor(s):

LAZAR Aurel A,
LIM Koon-Seng,
CHAN Mun Choon,
HUARD Jean-Francois,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9853578 A1 19981126
Application: WO 97US9363 19970523 (PCT/WO US9709363)
Priority Application: WO 97US9363 19970523

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

CA JP US

Main International Patent Class (v7): H04L-012/66

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext word count: 4998

English Abstract

A multimedia interface (G) for interfacing between a broadband network (R) and a service-and-applications network (B) is provided. The model (G) includes an organized collection of interfaces (121-125) designated as binding interface base (BIB). The interfaces include resource control (124) for routing, admission control and the like; the management services (125); connection management (122); and the information transport (121). The kernel forms a distributed operating system for managing and controlling multimedia networking resources to provide services with quality of services (QOS) guarantees.

French Abstract

Cette invention se rapporte a une interface multimedia (G) concue pour servir de lien entre un reseau a bande large (R) et un reseau de services et d'applications (B). Ce modele d'interface (G) contient une collection organisee d'interfaces (121-125) concues comme une base d'interfaces de liaison (BIB). Ces interfaces comportent des fonctions de commande de ressources (124) pour le routage, de commande d'admission et similaire; les services de gestion (125); la gestion des connexions (122) et le transport des informations (121). Le noyau forme un systeme d'exploitation repartit pour la gestion et la commande des ressources du reseau multimedia, afin de fournir des services avec des garanties de qualite de services (QOS).

Patent and Priority Information (Country, Number, Date):

Patent: ... 19981126

Fulltext Availability:

Detailed Description

Publication Year: 1998

Detailed Description

... that these APIs allow

service specification and creation in a high-level programming language.

The kernel forms a distributed operating system for managing and controlling multimedia networking resources to provide services with quality of service

(QOS) guarantees. The system includes an organized collection of interfaces designated as binding interface base (BIB), and an overlying set of processing capabilities.

Brief Description of the Drawing

Fig. 1 is schematic depiction of a broadband kernel in accordance with a preferred embodiment of the invention.

? Fig. 2 is a diagram of...

? t23/5,k

23/5,k/1 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2007 WIPO/Thomson. All rts. reserv.

00826033 ***Image available**

SYSTEM AND METHOD FOR RAPID COMPLETION OF DATA PROCESSING TASKS DISTRIBUTED
ON A NETWORK

SYSTEME ET PROCEDE POUR REGULER L'ACHEMINEMENT DES DONNEES DANS UN RESEAU
Patent Applicant/Assignee:

GOTO COM INC, 140 W. Union Street, Pasadena, CA 91103, US, US (Residence)
, US (Nationality)

Inventor(s):

CARRASCO John Joseph, 2841 St. George Street, Los Angeles, CA 90027, US,
DOLIOV Stephan, 45 Crestline Drive #4, San Francisco, CA 94131, US,
EHRENFRIED Frank B, 1150 Glenwood Drive, Millbrae, CA 94030, US,

Legal Representative:

GNOFFO Vincent J (agent), Brinks Hofer Gilson & Lione, P.O. Box 10087,
Chicago, IL 60610, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200159561 A1 20010816 (WO 0159561)

Application: WO 2001US3801 20010206 (PCT/WO US0103801)

Priority Application: US 2000502692 20000211

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE
ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class (v7): G06F-009/00

International Patent Class (v7): G06F-012/00

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext word Count: 8897

English Abstract

A method for running tasks on a network, comprising: creating (200) at least one sub-group of data from a universe of data; identifying (202) the sub-group of data with a header, the header containing executable code; sending (204) the sub-group of data to an available processor; and performing (206) tasks with the available processor to obtain result data using the sub-group of data and instructions contained in the executable code in the header.

French Abstract

L'invention concerne un procede d'execution de taches dans un reseau, qui consiste a creer (200) au moins un sous-groupe de donnees a partir de donnees multiples; a identifier (202) le sous-groupe de donnees comportant une en-tete, laquelle contient un code executable; a transmettre (204) le sous-groupe de donnees a un processeur disponible; et a executer (206) des taches a l'aide du processeur disponible afin d'obtenir des donnees resultantes au moyen du sous-groupe de donnees et des instructions contenues dans le code executable place dans l'en-tete.

Legal Status (Type, Date, Text)

Publication 20010816 A1 with international search report.

Publication 20010816 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

Examination 20011108 Request for preliminary examination prior to end of 19th month from priority date

Correction 20020207 Corrected version of Pamphlet: page 1, description, replaced by a new page 1 (with an updated version of the pamphlet front page); pages 1/5-5/5, drawings, replaced by new pages 1/2-2/2; due to late transmittal by the receiving office

Republication 20020207 A1 with international search report.

Fulltext Availability:

Detailed Description

Detailed Description

... representing a task queue. The values for these keys are hash tables also. This nested hash table has three required keys and any number of optional keys. The required keys are named 'event', 'columns', and 'delimiter'. The optional keys will be described later. The value for the key named 'event' specifies a group of data from the input file that contains the data elements of interest. The input data file parser identifies the groupname. For example, the value for the key named 'event' could be 'userClick'. The key named 'columns' points to another hash table. The keys of this nested hash table are the arbitrarily assigned column names that any later data processing tasks may need...

?

? t25/5,k/3,6

25/5,K/3 (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2007 European Patent Office. All rts. reserv.

00684742

Method for the efficient updating of the hash value of a data file
Verfahren zum effizienten Aktualisieren des Hashwertes eines Dateien
Procede de mise a jour efficace de la valeur d'adressage d'un fichier de donnees

PATENT ASSIGNEE:

Fischer, Addison M., (944372), 4073 Merchantile Avenue, Naples, Florida 33942, (US), (Proprietor designated states: all)

INVENTOR:

Fischer, Addison M., 4073 Merchantile Avenue, Naples, Florida 33942, (US)

LEGAL REPRESENTATIVE:

KUHNEN & WACKER (101502), Patent- und Rechtsanwaltsburo Postfach 19 64, 85319 Freising, (DE)

PATENT (CC, No, Kind, Date): EP 654920 A2 950524 (Basic)
EP 654920 A3 000308
EP 654920 B1 030102

APPLICATION (CC, No, Date): EP 94303430 940512;

PRIORITY (CC, No, Date): US 154520 931119

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

INTERNATIONAL PATENT CLASS (V7): H04L-009/32

CITED PATENTS (EP B): EP 328232 A; EP 386867 A; WO 90/13084 A

ABSTRACT EP 654920 A2

The disclosed methodology permits an insecure computing system to safely perform high security electronic financial transactions. The present invention permits the hash of a file to be taken on an incremental basis. It permits any part of the file to be changed while allowing a new aggregate hash to be computed based on the revised file portion and the prior total hash. The aggregate hash is readily updatable with each record revision without having to recompute the hash of the entire file in accordance with conventional techniques. These objectives using two functions. The first function is an effective one-way hash function "H" for which it is computationally impossible to find two data values that hash to the same result. The second function is a commutative and associative function "F" (and inverse "F_{inv}") and provides a mechanism for combining the aggregate hash and the hash of updated records. Examples of these latter functions include exclusive OR ("XOR"), and arithmetic addition. The methodology involves combining the hash of each file record and the hash of an identification of the record (i.e., a record number or key). These hashes are combined using a function ("F") whereby individual records may be extracted using the inverse of that function (F_{inv}). In this fashion, an individual record may be extracted from the aggregate hash and updated. with each update, the file hash as ~~computed according to this invention~~ is preferably also written after being encrypted under a key known only to the valid user, or if it is digitally signed by the valid user or if it is held in a tamper resistant storage. Each record is represented by its identification hashed together with its data content. All such record are added together to provide a highly secure integrity check. This aggregate hash reflects the entire database such that the tampering (or rearranging) of any data record is revealed by the use of the record identifier (i.e., record number) in the hash calculation due to its impact on the aggregate hash (e.g., the sum). (see image in original document)

ABSTRACT WORD COUNT: 345

NOTE:

Figure number on first page: 4

LEGAL STATUS (Type, Pub Date, Kind, Text):

Examination: 001011 A2 Date of request for examination: 20000814
 Search Report: 20000308 A3 Separate publication of the search report
 Change: 040519 B1 Legal representative(s) changed 20040402
 Lapse: 040121 B1 Date of lapse of European Patent in a
 contracting state (Country, date): AT
 20030102, DK 20030402, ES 20030730, GR
 20030102, NL 20030102, PT 20030402,
 Lapse: 040107 B1 Date of lapse of European Patent in a
 contracting state (Country, date): AT
 20030102, DK 20030402, GR 20030102, NL
 20030102, PT 20030402,
 Lapse: 031119 B1 Date of lapse of European Patent in a
 contracting state (Country, date): AT
 20030102, GR 20030102, NL 20030102, PT
 20030402,
 Lapse: 031022 B1 Date of lapse of European Patent in a
 contracting state (Country, date): NL
 20030102, PT 20030402,
 Grant: 030102 B1 Granted patent
 Examination: 010411 A2 Date of dispatch of the first examination
 report: 20010226
 Lapse: 031008 B1 Date of lapse of European Patent in a
 contracting state (Country, date): NL
 20030102,
 Lapse: 031112 B1 Date of lapse of European Patent in a
 contracting state (Country, date): GR
 20030102, NL 20030102, PT 20030402,
 Oppn: 031210 B1 Opposition 01/20031001 opposition filed
 Giesecke & Devrient GmbH (65761)
 Prinzregentenstr. 159 81677 Munchen (DE)
 Change: 040114 B1 Legal representative(s) changed 20031125
 Lapse: 040303 B1 Date of lapse of European Patent in a
 contracting state (Country, date): AT
 20030102, BE 20030102, DK 20030402, ES
 20030730, GR 20030102, NL 20030102, PT
 20030402,
 Application: 950524 A2 Published application (A1with Search Report
 ;A2without Search Report)

LANGUAGE (Publication,Procedural,Application): English; English; English
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB95	812
CLAIMS B	(English)	200301	788
CLAIMS B	(German)	200301	1467
CLAIMS B	(French)	200301	948
SPEC A	(English)	EPAB95	7014
SPEC B	(English)	200301	11005

Total word count - document A 7827

Total word count - document B 14208

Total word count - documents A + B 22035

...CLAIMS data which are modified from time to time comprising the steps
 of:

performing a predetermined hash operation on a first data
 group and indicia identifying said first group ;
 performing a predetermined hash operation on a second data
 group and indicia identifying said second group ; and
 combining the hashes to determine an aggregate hash using a
 function whereby said hash of said first group and said hash of
 said second group may be subsequently extracted from the aggregate
 hash using the inverse...

...comprising the steps of:

combining the informational content of a data record with a record identifier to determine an aggregate data string;
performing a hashing operation on said aggregate data string to determine a hash value; and
applying a function having both associative and commutative properties to said hash value.

15. A method according to any one of claims 1, 9, 13 or 14...

...CLAIMS units are sectors.

9. A method according to claim 1, further including:
performing a predetermined hash operation on a first data group and indicia identifying said first group;
performing a predetermined hash operation on a second data group and indicia identifying said second group; and
combining the hashes to determine an aggregate hash using a function whereby said hash of said first group and said hash of said second group may be subsequently extracted from the aggregate hash using the inverse...

...data unit by applying a function having both associative and commutative properties to the aggregate hash and the updated data unit.

14. A method according to claim 1, further including:
combining the informational content of a data record with a record identifier to determine an aggregate data string;
performing a hashing operation on said aggregate data string to determine a hash value; and
applying a function having both associative and commutative properties to said hash value.

15. A method according to any one of claims 1, 9, 13, or 14...

25/5,K/6 (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2007 WIPO/Thomson. All rts. reserv.

00794269 **Image available**

METHOD FOR TRANSFERRING A SOFTWARE MODULE FROM A SENDER TO A RECEIVER IN A COMPUTER SYSTEM OR NETWORK

PROCEDE DE TRANSFERT D'UN MODULE LOGICIEL DEPUIS UN ENVOYEUR A UN DESTINATAIRE DANS UN SYSTEME OU RESEAU INFORMATIQUE

Patent Applicant/Assignee:

TRYLLIAN BV, Kruislaan 400, NL-1098 SM Amsterdam, NL, NL (Residence), NL (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

BOLWIDT Erwin Joost, Madridplantsoen 141, NL-2034 VS Haarlem, NL, NL (Residence), NL (Nationality), (Designated only for: US)

Legal Representative:

DE VRIES Johannes Hendrik Fokke (agent), De Vries & Metman B.V., Overschiestraat 180, NL-1062 XK Amsterdam, NL,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200127757 A1 20010419 (WO 0127757)

Application: WO 2000NL720 20001006 (PCT/WO NL0000720)

Priority Application: NL 1013249 19991008

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE
ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class (v7): G06F-009/46

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 2982

English Abstract

In a method for transferring a software module from a sender to a receiver in a computer system or network, wherein the software module comprises at least one object and at least one class, the object being an instance of the class(es), each class or group of classes is provided with a class identifier. Both the sender and receiver comprises a database of classes and groups of classes with corresponding class identifiers. The sender transmits the class identifier of a software module to be transferred to the receiver and the receiver checks its database for presence of the received class identifier. The receiver transmits a message "present" or "absent" to the sender and the sender transfers only the object of the software module or both the object and the class or group of classes depending on the presence or absence of the class or group of classes at the receiver.

French Abstract

Dans un procede destine a transferer un module logiciel depuis un envoyeur a un destinataire au sein d'un systeme ou d'un reseau informatique, dans lequel le module logiciel comprend au moins un objet et au moins une classe, l'objet etant une instance de la classe, chaque classe ou groupe de classes est pourvu d'un identificateur de classe. L'envoyeur et le destinataire possedent tous deux une base de donnees des classes et des groupes de classes, ainsi que les identificateurs de classe correspondants. L'envoyeur transmet au destinataire un identificateur de classe d'un module logiciel destine a etre transfere et le destinataire verifie dans sa base de donnees la presence de l'identificateur recu. Le destinataire transmet alors a l'envoyeur le message <= present >= ou <= absent >=, et l'envoyeur ne transfere que l'objet du module logiciel, ou bien a la fois l'objet et la classe, ou groupe de classes, selon la presence ou l'absence de la classe, ou groupe de classes, au niveau du destinataire.

Legal Status (Type, Date, Text)

Publication 20010419 A1 with international search report.

Examination 20010712 Request for preliminary examination prior to end of 19th month from priority date

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... class or group of classes of a software module and the result of a cryptographic hash function, wherein said result is obtained by executing a cryptographic hash function on the data file of the class or group of classes. In this manner a secure identifier is obtained, wherein errors due to identical identifiers for different classes or groups of classes are excluded.

According to a preferred embodiment, the receiver checks a class or group of classes received from a sender by comparing the result of the hash function of the received class identifier with the result obtained by carrying out the same cryptographic hash function on the data file of the class or group of classes received.

In this manner security in transferring software modules is guaranteed as receivers will refuse to use classes where the hash function result of the identifier does not match with the hash function result obtained by...at the receiver side. At the sender side a program is executed determining a cryptographic hash function of the data file of the group of classes and the result of this hash function is stored. This hash function result is the second part of the unique class identifier .

It is noted that any cryptographic hash function can be used which provides a result which is significantly shorter than the original...

Claim

... class or group of classes received from a sender by comparing the result of the hash function of the received class identifier with the result obtained by carrying out the same cryptographic hash function on the data file of the class or group of classes received.

8 Method according to claim 7, wherein the receiver transmits a message...

?

File 347:JAPIO Dec 1976-2006/Nov(Updated 070228)

(c) 2007 JPO & JAPIO

File 350:Derwent WPIX 1963-2006/UD=200715

(c) 2007 The Thomson Corporation

Patents
abstracts

Set	Items	Description
S1	0	AGGID? ?
S2	2653756	AGGREGAT? OR GROUP???? OR BATCH???? L???? OR BUNCH???? OR CLUSTER???? OR A
S3	154542	CATALOG? OR CATEGOR??? OR CLASSIFY? SIFICATION? OR FAMILY? OR FAMILIES OR TAXONOM?
S4	148190	ORGANIZ??? OR ORGANIZAT? OR ORGANIS??? OR ORGANISAT? OR CL- USTER????
S5	10436	KERNEL? ?
S6	206437	(TRACE? ? OR TRACING OR PERFORM??? OR PERFORMANCE? OR BEHA- VIOR? OR BEHAVIOUR? OR BEHAV??? OR EVENT? ?)(5N)(DATUM OR DATA OR INFORMATION)
S7	307692	(OPERATION?? OR FUNCTION??? OR QUALITY OR RELIAB? OR QOS OR DIAGNOST? OR EVALUAT? OR ASSESS?)(5N)(DATUM OR DATA OR INFOR- MATION)
S8	91429	(ANALYS? OR ANALYT? OR ANALYZ? OR BIST OR SELFTEST? OR SEL- FDIAGNOS? OR DEBUG? OR DE()BUGG??? OR FAIL?)(5N)(DATUM OR DATA OR INFORMATION)
S9	46343	(ABEND? ? OR FAULT? OR DEFECT? OR ANOMAL? OR DEFICIEN? OR - ABNORMA? OR FLAW? OR IMPAIR? OR ABERRA?)(5N)(DATUM OR DATA OR INFORMATION)
S10	74498	(MALFUNCTION? OR INOPERA? OR DYSFUNCT? OR DISFUNCT? OR BUG? ? OR ERROR? ? OR DEVIA? OR IRREGULAR?)(5N)(DATUM OR DATA OR - INFORMATION)
S11	5233	(CORRUPT? OR DEGRAD?)(5N)(DATUM OR DATA OR INFORMATION)
S12	10850	S2:S4(5N)(ABEND? ? OR FAULT? OR DEFECT? OR ANOMAL? OR DEFI- CIEN? OR ABNORMA? OR FLAW? OR IMPAIR? OR ABERRA?)
S13	10154	S2:S4(5N)(MALFUNCTION? OR INOPERA? OR DYSFUNCT? OR DISFUNC- T? OR BUG? ? OR ERROR? ? OR DEVIA? OR IRREGULAR?)
S14	1974	S2:S4(5N)(CORRUPT? OR DEGRAD?)
S15	18337	S2:S4(3N)(ID OR IDS OR IDENTIFIER? ? OR TAG? ? OR LABEL???? OR INDICANT? ? OR INDICAT?R? ? OR DESIGNAT?)
S16	3971	S2:S4(3N)(METATAG? OR METAVALUE? OR INDICIA? ? OR NAME? ?)
S17	644537	KEY? ? OR CODE OR CODES
S18	18122	HASH? OR MESSAGE()DIGEST? OR MESSAGEDIGEST? OR DIGEST? ?
S19	76	S2:S4(5N)(BUG OR BUGS OR BUGGY? ?)
S20	12242	S2:S4(5N)S6:S8
S21	885	S15:S16 AND (S19:S20 OR S12:S14)
S22	230	S2:S4(5N)S5
S23	3	S15:S16 AND S22
S24	1093	(S22 OR S19:S20 OR S12:S14)(10N)S17
S25	48	(S21 OR S23) AND S24
S26	6	S25 AND AC=US/PR AND AY=(1963:2003)/PR
S27	17	S25 AND AC=US AND AY=1963:2003
S28	17	S25 AND AC=US AND AY=(1963:2003)/PR
S29	38	S25 AND PY=1963:2003
S30	41	S26:S29
S31	4	S18 AND (S21 OR S23)
S32	3	S31 NOT S25
S33	5	S5 AND (S21 OR S23)
S34	5	S33 NOT (S25 OR S32)

File 347:JAPIO Dec 1976-2006/Nov(Updated 070228)

(c) 2007 JPO & JAPIO

File 350:Derwent WPIX 1963-2006/UD=200715

(c) 2007 The Thomson Corporation

Set	Items	Description
S1	0	AGGID? ?
S2	2653756	AGGREGAT? OR GROUP???? OR BATCH???? OR BUNDL???? OR ASSEMB- L???? OR BUNCH???? OR CLUSTER???? OR AGGROU?
S3	154542	CATALOG? OR CATEGOR??? OR CLASSIFY? OR CLASSIFIE?? OR CLAS- SIFICATION? OR FAMILY? OR FAMILIES OR TAXONOM?
S4	148190	ORGANIZ??? OR ORGANIZAT? OR ORGANIS??? OR ORGANISAT? OR CL- USTER????
S5	10436	KERNEL? ?
S6	191716	(TRACE? ? OR TRACING OR PERFORM??? OR PERFORMANCE? OR BEHA- VIOR? OR BEHAVIOUR? OR BEHAV???) (5N) (DATUM OR DATA OR INFORMA- TION)
S7	307692	(OPERATION?? OR FUNCTION??? OR QUALITY OR RELIAB? OR QOS OR DIAGNOST? OR EVALUAT? OR ASSESS?) (5N) (DATUM OR DATA OR INFOR- MATION)
S8	74187	(ANALYS? OR ANALYT? OR ANALYZ?) (5N) (DATUM OR DATA OR INFOR- MATION)
S9	10850	S2:S4(5N) (ABEND? ? OR FAULT? OR DEFECT? OR ANOMAL? OR DEFICI- EN? OR ABNORMA? OR FLAW? OR IMPAIR? OR ABERRA?)
S10	10154	S2:S4(5N) (MALFUNCTION? OR INOPERA? OR DYSFUNCT? OR DISFUNC- T? OR BUG? ? OR ERROR? ? OR DEVIA? OR IRREGULAR?)
S11	5362	S2:S4(5N) (CORRUPT? OR DEGRAD? OR EVENT? ? OR BIST OR SELF- EST? OR SELFDIAGNOS? OR DEBUG? OR BUGGY OR BUG OR BUGS)
S12	11456	S2:S4(5N) S6:S8
S13	230	S2:S4(5N) S5
S14	18337	S2:S4(3N) (ID OR IDS OR IDENTIFIER? ? OR TAG? ? OR LABEL???? OR INDICANT? ? OR INDICAT?R? ? OR DESIGNAT?)
S15	22671	(S2:S4 OR CLASS??) (3N) (ID OR IDS OR IDENTIFIER? ? OR TAG? ? OR LABEL???? OR INDICANT? ? OR INDICAT?R? ? OR DESIGNAT?)
S16	4734	(S2:S4 OR CLASS??) (3N) (METATAG? OR METAVALUE? OR INDICIA? ? OR NAME? ?)
S17	644537	KEY? ? OR CODE OR CODES
S18	18122	HASH? OR MESSAGE() DIGEST? OR MESSAGEDIGEST? OR DIGEST? ?
S19	1002	S14:S16 AND S9:S13
S20	1338	S14:S16(10N) S17
S21	66	S19 AND S20
S22	1	S21 AND S18
S23	5	S19 AND S18
S24	1	S21 AND (S5 OR OS OR OPERATING()) SYSTEM? ?)
S25	41420	S2:S4(5N) (TRACE? ? OR TRACING OR PERFORM??? OR PERFORMANCE? OR BEHAVIOR? OR BEHAVIOUR? OR BEHAV???)
S26	144464	S2:S4(5N) (OPERATION?? OR FUNCTION??? OR QUALITY OR RELIAB? OR QOS OR DIAGNOST? OR EVALUAT? OR ASSESS?)
S27	11567	S2:S4(5N) (ANALYS? OR ANALYT? OR ANALYZ?)
S28	2889	S14:S16 AND S25:S27
S29	28	S28 AND S18
S30	41	S28 AND (S5 OR OS OR OPERATING()) SYSTEM? ?)
S31	6	S19 AND S5
S32	65	S29:S31 NOT S22:S24
S33	35	S32 AND AC=US/PR AND AY=(1963:2003)/PR
S34	46	S32 AND AC=US AND AY=1963:2003
S35	46	S32 AND AC=US AND AY=(1963:2003)/PR
S36	51	S32 AND PY=1963:2003
S37	56	S33:S36

? t32/69,k/3

32/69,K/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2007 The Thomson Corporation. All rts. reserv.

*Keep or
delete* ↑

0007604382 - Drawing available
WPI ACC NO: 1996-221594/199622
XRPX Acc No: N1996-186030

Relational database grouping hash operation for executing SQL group-by and aggregation queries - reading database table row, hashing group identifier to generate index into table, determining if matching group table entry exists for group identifier, aggregating fields into corresp. group data fields and updating housekeeping data

Patent Assignee: TANDEM COMPUTERS INC (TAND)

Inventor: SHARMA A; ZELLER H

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 5511190	A	19960423	US 1995376026	A	19950120	199622 B

Priority Applications (no., kind, date): US 1995376026 A 19950120

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 5511190	A	EN	22	8	

Alerting Abstract US A

The structured query language (SQL) grouping and aggregation system incorporates hash-based techniques, several overflow handling strategies and statistics-based process-selection criteria. SQL group-by queries are executed on distributed database tables or tables stored locally to the database management system (DBMS) processor executing the grouping method.

Hash-based techniques allow groupings and aggregates to be generated on the fly through the use of partial aggregates maintained in primary memory. Where primary memory is limited, groups and aggregates are still generated for as many groups as can be maintained in primary memory, while various overflow procedures are provided for buffering ungrouped data and writing that data to an overflow disk file for later processing. In one overflow procedure, raw data from groups that cannot be aggregated in primary memory are buffered then written to the overflow disk file.

In a second overflow procedure, ungroupable raw data is formatted the same as data being aggregated in the group table, buffered, and then written to the overflow file. In a third overflow procedure, ungroupable raw data is partially aggregated in an output buffer maintained in primary memory before being written to the overflow file maintained in secondary memory. Database table statistics maintained by a cataloguer are consulted to determine whether hash-based grouping or conventional sort based grouping should be used to execute a group-by query. The system is adaptable to running a grouping query against a partitioned database on distributed processors.

ADVANTAGE - Allows groupings and aggregates to be stored on-the-fly through use of partial aggregates in primary memory.

Title Terms/Index Terms/Additional Words: RELATED; DATABASE; GROUP; HASH ;
OPERATE; EXECUTE; SQL; AGGREGATE; QUERY; READ; TABLE; ROW; IDENTIFY;
GENERATE; INDEX; DETERMINE; MATCH; ENTER; EXIT; FIELD; CORRESPOND; DATA;
UPDATE; HOUSEHOLD

Class Codes

International Classification (Main): G06F-017/30

File Segment: EPI;
DWPI Class: T01

Manual Codes (EPI/S-X): T01-J05B3; T01-S

Relational database grouping hash operation for executing SQL group-by and aggregation queries...

...reading database table row, hashing group identifier to generate index into table, determining if matching group table entry exists for group identifier, aggregating fields into corresp. group data fields and updating housekeeping data

Original Titles:

Hash -based database grouping system and method

Alerting Abstract ...The structured query language (SQL) grouping and aggregation system incorporates hash -based techniques, several overflow handling strategies and statistics-based process-selection criteria. SQL group-by...

... Hash -based techniques allow groupings and aggregates to be generated on the fly through the use...

...in secondary memory. Database table statistics maintained by a cataloguer are consulted to determine whether hash -based grouping or conventional sort based grouping should be used to execute a group-by

Title Terms.../Index Terms/Additional Words: HASH ;

Original Publication Data by Authority

Original Abstracts:

...query language (SQL) grouping and aggregation system and method that incorporates hash-based techniques, several overflow handling strategies and statistics-based process-selection criteria. The method can execute SQL group-by...

...to the database management system (DBMS) processor executing the grouping method. Hash-based techniques allow groupings and aggregates to be generated on the fly through the use of partial aggregates maintained...

...table statistics maintained by a cataloger are consulted to determine whether hash-based grouping or conventional sort based grouping should be used to execute a group-by query. The system is...

Claims:

A method for performing a hash grouping operation on a relational database table, said table comprising rows and columns, said columns including at...

...group column and zero or more data fields to said zero or more data columns; (2) applying a hash function to said group identifier to generate a hashed group value, said hashed group value serving as an index into a memory-resident hash table, said hash table mapping hashed group values into corresponding memory-resident group table entries, each group table entry including group data fields...

...store for a single group aggregated raw data from said data fields, a group identifier and housekeeping data; (3) determining from contents of said hash table whether a matching group table entry exists for a group defined by said group identifier; (4) when said matching group table entry exists, aggregating contents of said data fields into corresponding group...

...an additional group table entry, writing into said additional group table entry said group identifier and said data fields, and initializing said housekeeping data. (6) when said matching group table

30/69,K/16 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2007 The Thomson Corporation. All rts. reserv.

0013659561 - Drawing available
WPI ACC NO: 2003-755771/ 200371
XRPX ACC No: N2003-605588

Defect classification /inspection system for semiconductor wafers, has database preparing unit that regroups defects having similar characteristics and executing unit that classifies object defects
Patent Assignee: SONY MAGNESCALE KK (SONY); SONY PRECISION TECHNOLOGY INC (SONY); KONDO H (KOND-I); OKUYAMA M (OKUY-I); SAITO Y (SAIT-I); SONY MFG SYSTEMS CORP (SONY)

Inventor: KONDO H; OKUYAMA M; OKUYAMA S; SAITO H; SAITO Y
Patent Family (7 patents, 5 countries)

Patent			Application			
Number	Kind	Date	Number	Kind	Date	Update
US 20030152276	A1	20030814	US 2002222431	A	20020816	200371 B
DE 10240877	A1	20030821	DE 10240877	A	20020904	200371 E
JP 2003233801	A	20030822	JP 200232910	A	20020208	200371 E
KR 2003067457	A	20030814	KR 200250747	A	20020827	200382 E
TW 565689	A	20031211	TW 2002118288	A	20020814	200434 E
US 7171039	B2	20070130	US 2002222431	A	20020816	200710 E
KR 615738	B1	20060825	KR 200250747	A	20020827	200714 E

Priority Applications (no., kind, date): JP 200232910 A 20020208; US 2002222431 A 20020816

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20030152276	A1	EN	12	5	
JP 2003233801	A	JA	10		
TW 565689	A	ZH			
KR 615738	B1	KO			

Previously issued patent KR 2003067457

Alerting Abstract US A1

NOVELTY - The system (100) has a unit (50) that extracts a characteristics quantity of an image of a defect part and another extracting unit (60) digitizes the quantity. A database preparing unit (70) regroups defects having similar characteristics by a defect classification unit on the basis of the digitized characteristics information. An executing unit (80) classifies the defects of the object with reference to the database.

USE - Used for classifying and inspecting defects of semiconductor wafers.

ADVANTAGE - By reducing the operator's participation in the data base preparation, a database containing defect groups can be reduced with the similarity in defect characteristics that can be easily constructed. The defects are classified on a set of hierarchical levels, thereby increase the accuracy and eliminate the classification errors.

DESCRIPTION OF DRAWINGS - The drawing shows a block diagram representing the structure of a defect classification or inspection system.

20 Image pickup unit

50 Defect extracting unit

60 Characteristics extracting unit

70 Database preparing unit

80 Classification executing unit

100 Defect classification /inspection system

Title Terms/Index Terms/Additional Words: DEFECT; CLASSIFY; INSPECT; SYSTEM
; SEMICONDUCTOR; WAFER; DATABASE; PREPARATION; UNIT; SIMILAR;
CHARACTERISTIC; EXECUTE; OBJECT

Class Codes

International Classification (Main): G01N-021/00, H01L-021/66

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G01N-0021/956	A	I	F	R	20060101
G06F-0017/30	A	I	L	R	20060101
G06T-0001/00	A	I	L	R	20060101
G06T-0007/00	A	I		R	20060101
H01L-0021/66	A	I	F	B	20060101
G01N-0021/88	C	I	F	R	20060101
G06F-0017/30	C	I	L	R	20060101
G06T-0001/00	C	I	L	R	20060101
G06T-0007/00	C	I		R	20060101
H01L-0021/66	C	I	F	B	20060101

File Segment: EPI;

DWPI Class: S01; T01; U11

Manual Codes (EPI/S-X): S01-G02B1; T01-E01A; T01-G02A1; T01-J05B4F;

U11-F01B3

Defect classification /inspection system for semiconductor wafers, has database preparing unit that regroups defects having similar characteristics and executing unit that classifies object defects

Original Titles:

... DEFECT CLASSIFYING /INSPECTING DEVICE...

... Defect classification /inspection system...

... Defect classification /inspection system

Alerting Abstract ...digitizes the quantity. A database preparing unit (70) regroups defects having similar characteristics by a defect classification unit on the basis of the digitized characteristics information. An executing unit (80) classifies the defects of the object with reference to the database. USE - used for classifying and inspecting defects of semiconductor wafers...

...ADVANTAGE - By reducing the operator's participation in the data base preparation, a database containing defect groups can be reduced with the similarity in defect characteristics that can be easily constructed. The defects are classified on a set of hierarchical levels, thereby increase the accuracy and eliminate the classification errors .

...DESCRIPTION OF DRAWINGS - The drawing shows a block diagram representing the structure of a defect classification or inspection system...

...100 Defect classification /inspection system

Original Publication Data by Authority

Original Abstracts:

...a characteristics extracting unit. A database preparing unit regroups defects having similar characteristics by a defect classification unit on the basis of the characteristics information digitized by the characteristics extracting unit with respect to defects belonging to a defect group selected and designated by an operator via a display/input unit, and prepares on a database memory a database in which the defects of the inspection object are hierarchically classified. A classification executing unit hierarchically classifies the defects of the inspection object with reference to the database provided by the database preparing unit...

...unit from the image of the defect part of the inspection object extracted by the defect extracting unit. Thus, a defect classification /inspection system having high classification accuracy is provided...

...a characteristics extracting unit. A database preparing unit regroups defects having similar characteristics by a defect classification unit on the basis of the characteristics information digitized by the characteristics extracting unit with respect to defects belonging to a defect group selected and designated by an operator via a display/input unit, and prepares on a database memory a database in which the defects of the inspection object are hierarchically classified. A classification executing unit hierarchically classifies the defects of the inspection object with reference to the database provided by the database preparing unit...

...unit from the image of the defect part of the inspection object extracted by the defect extracting unit. Thus, a defect classification /inspection system having high classification accuracy is provided.

Claims:

...What is claimed is: **1**. A defect classification /inspection system comprising: a defect extracting unit for picking up an image of an inspection object and comparing the image...

...of the defect part extracted by the defect extracting unit; a database preparing unit including defect classifying means for grouping defects having similar characteristics on the basis of the characteristics information digitized by the characteristics extracting unit, classification code providing means for providing a classification code to the defects grouped by the defect classifying means, storage means for saving the characteristics information of the defects grouped by the defect classifying means together with the classification code provided by the classification code providing means as a database, and selecting/designating means for selecting and designating a defect group for which a database of a next hierarchical level is to be prepared, from the respective defect groups having the grouped defects and having the classification code provided thereto, the database preparing unit regrouping defects having similar characteristics by the defect classifying means on the basis of the characteristics information digitized by the characteristics extracting means with respect to the defects belonging to the defect group selected and designated by the selecting/designating means, and preparing a database in which the defects of the inspection object are hierarchically classified; and a classification executing unit for hierarchically classifying the defects of the inspection object with reference to the database provided by the database preparing unit...

...What is claimed is: 1. A defect classification /inspection system comprising: a defect extracting unit for picking up an image of an inspection object and comparing the image...

...of the defect part extracted by the defect extracting unit; a database preparing unit including defect classifying means for grouping defects having similar characteristics on the basis of the characteristics information digitized by the characteristics extracting unit, classification code providing means for providing a classification code to the defects grouped by the defect classifying means, storage means for saving the characteristics information of the defects grouped by the defect classifying means together with the classification code provided by the classification code providing means as a database, and selecting/designating means for selecting and designating groups having mixed defects for which a database of a next hierarchical level is to be prepared, from the respective defect groups having the grouped defects and having the classification code provided thereto, the database preparing unit regrouping defects having similar characteristics by the defect classifying means on the basis of

G06K-0009/00	A	I	F	B	20060101
H01L-0021/66	A	I	L	R	20060101
G06K-0009/62	A	I	L	B	20060101
G01N-0021/88	C	I	F	R	20060101
H01L-0021/66	C	I	L	R	20060101

File Segment: EPI;

DWPI Class: S03; U11

Manual Codes (EPI/S-X): S03-E04F2; U11-F01A2; U11-F01B3; U11-F01B4

Defective wafer image classification method for semiconductor device manufacture, involves arranging defect images as array depending on characteristic of image of designated category and displays them on screen

Original Titles:

... Defect image classifying method and apparatus and a semiconductor device manufacturing process based on the method and apparatus...

... Defect image classifying method and apparatus and a semiconductor device manufacturing process based on the method and apparatus

Alerting Abstract ...NOVELTY - Several defect images are arranged as array depending on characteristics of the image of designated category and displayed on a screen. USE - Classification of defective wafer image obtained using microscope for semiconductor device production...

...DESCRIPTION OF DRAWINGS - The figure shows the display screen showing classified arrangement of defect image. (Drawing includes non-English language text).

Original Publication Data by Authority

Original Abstracts:

...for classifying and displaying images are provided. In an embodiment of the present invention a defect image classification method using inspected objects is provided. The method includes defect images obtained from at least one inspected object. Next a set of defect images is classified into a specified category, which has a feature. The defect images are arranged for display according to the feature and then displayed. The arranging of...

...also be based on an evaluation value for each defect image. Another embodiment provides a defect image classification method using inspected objects. Defect images are obtained from at least one inspected object. Next the defect images are classified into a plurality of categories and at least two information items for example, a defect...

...of defects in the inspected object, information associated with a category of the plurality of categories, and a defect size distribution, are displayed...

...for classifying and displaying images are provided. In an embodiment of the present invention a defect image classification method using inspected objects is provided. The method includes defect images obtained from at least one inspected object. Next a set of defect images is classified into a specified category, which has a feature. The defect images are arranged for display according to the feature and then displayed. ...also be based on an evaluation value for each defect image. Another embodiment provides a defect image classification method using inspected objects. Defect images are obtained from at least one inspected object. Next the defect images are classified into a plurality of categories and at least two information items for example, a defect...

...of defects in the inspected object, information associated with a category of the plurality of categories, and a defect size distribution, are displayed.

Claims:

What is claimed is: 1. A defect image classification system for classifying defect images, produced from at least one object of inspection by imaging, into a plurality of...

...means to calculate features of the defect images; categorization means to specify a set of defect images to match a specified category; evaluation means to calculate evaluation values of the defect images using the features of the...

...What is claimed is: 1. A computer memory storing code for a defect image classification method using inspected objects, said computer memory comprising: code for obtaining defect images from at least one inspected object; code for extracting features from...

...code for displaying a plurality of second defect images on the screen, wherein the second defect images belong to one of classified defect categories; and code for Basic Derwent Week: 200226
? t30/69,k/29

30/69,k/29 (Item 17 from file: 350)
DIALOG(R) File 350: Derwent WPIX
(c) 2007 The Thomson Corporation. All rts. reserv.

0009378353 - Drawing available
WPI ACC NO: 1999-313047/ 199926
Related WPI Acc No: 1999-326768
XRPX Acc No: N1999-233824

Analyzing semiconductor production data

Patent Assignee: KLA TENCOR CORP (KLAT-N)

Inventor: HARDIKAR M; KULKARNI A; SHIFLETT R; ZHOU S

Patent Family (6 patents, 20 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
WO 1999022310	A1	19990506	WO 1998US22735	A	19981027	199926 B
EP 1025512	A1	20000809	EP 1998956236	A	19981027	200039 E
			WO 1998US22735	A	19981027	
US 6097887	A	20000801	US 1997958780	A	19971027	200039 E
US 6233719	B1	20010515	US 1997958288	A	19971027	200129 E
JP 2001521249	W	20011106	WO 1998US22735	A	19981027	200203 E
			JP 2000518336	A	19981027	
US 6775819	B1	20040810	US 1997958780	A	19971027	200453 E
			US 1999394388	A	19990910	

Priority Applications (no., kind, date): US 1999394388 A 19990910; US 1997958780 A 19971027; US 1997958288 A 19971027

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 1999022310	A1	EN	39	8	
National Designated States, Original: JP					
Regional Designated States, Original: AT BE CH CY DE DK ES FI FR GB GR IE					
IT LU MC NL PT SE					
EP 1025512	A1	EN			PCT Application WO 1998US22735
Based on OPI patent WO 1999022310					
Regional Designated States, Original: DE FR GB					
JP 2001521249	W	JA	48		PCT Application WO 1998US22735
Based on OPI patent WO 1999022310					
US 6775819	B1	EN			Continuation of application US
1997958780					

Continuation of patent US 6097887

33/7/8 (Item 8 from file: 2)
DIALOG(R)File 2:INSPEC
(c) 2007 Institution of Electrical Engineers. All rts. reserv.

04557299 INSPEC Abstract Number: B90010480, C90014708
Title: High-speed event counting and classification using a dictionary hash technique
Author(s): McKenney, P.E.
Author Affiliation: Div. of Inf. Sci. & Technol., SRI Int., Menlo Park, CA, USA
Conference Title: Proceedings of the 1989 International Conference on Parallel Processing (Cat. No.89CH2701-1) p.71-5 vol.3
Editor(s): McAuliffe, K.P.; Kogge, P.M.
Publisher: Pennsylvania State Univ. Press, University Park, PA, USA
Publication Date: 1989 Country of Publication: USA 3 vol.
(xv+137+xiii+263+xiii+262) pp.
ISBN: 0 271 00686 2
Conference Sponsor: Penn State Univ
Conference Date: 8-12 Aug. 1989 Conference Location: St. Charles, IL, USA
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: A 'dictionary hash' technique is discussed. When presented with a large group of labelled events, this technique can stochastically determine the number of unique labels quickly and with a small amount of memory. It is applicable to areas such as signal processing, process monitoring and control, and computer communications network monitoring and control. The author focuses on application of this technique to congestion-avoidance algorithms in high-speed computer communications packet networks. In this application, the events are packet arrivals at a particular network node and the labels consist of the source and destination addresses in the packets. The set of all packets with a particular source/destination address pair constitutes a 'session'; the more sophisticated congestion-avoidance algorithms require knowledge of the number of active sessions. This knowledge can be provided in an effective and timely manner by the dictionary hash technique presented. The technique is configurable to any desired degree of accuracy and lends itself to a simple realization in high-speed parallel hardware. (11 Refs)
Subfile: B C

33/7/38 (Item 2 from file: 144)
DIALOG(R)File 144:Pascal
(c) 2007 INIST/CNRS. All rts. reserv.

12510509 PASCAL No.: 96-0181994
Organization of a file system using class name expressions based on a B-tree
HIRADE M; TANAKA E
Graduate School of Engineering, Kobe University, Kobe, 657, Japan
Journal: Systems and computers in Japan, 1996, 27 (1) 1-11
ISSN: 0882-1666 CODEN: SCJAEP Availability: INIST-15508;
354000053193230010
No. of Refs.: 13 ref.
Document Type: P (Serial); V (Translation) ; A (Analytic)
Country of Publication: United States
Note: Trad. de : Denshi Joho Tsushin Gakkai Ronbunshi, JP, 1994, J77-D-I, 12, 794-802
Language: English
In the search of data from a database using a key, it is desirable that, even if the input key or the key in the database is in error, and there is no exactly matched key, still the system lists similar keys or retrieve the closest key. This paper discusses the organization and manipulation of the file, where the keys similar to the input key are listed, or the closest

key is retrieved. The basic idea is to combine the high efficiency of the B-tree for the retrieve/insert/delete of the key, and the ability of the hierarchical file based on the class name expression for the similar key search. By such an elaboration, it is possible to realize the search of similar keys, which cannot be executed by the B-tree, or insert/delete of the key, which is not considered in the hierarchical file based on the class name expression. An experiment is made by splitting the characters into two classes, i.e., a to m and n to z, and using 16,561 English words of length 6 to 10. The number of read-outs from the secondary memory in the retrieve/insert/delete of the key is approximately 3, and the number of write-ins into the secondary memory in insert/delete is approximately 1. The search for the similar keys requires approximately 7.3 to 8.5 times larger read-ins compared to the search of the exact key. The retrieval rate is approximately 95 to 99 percent for a single error (substitution/insertion/missing). The efficiency of the use of the memory is approximately 70 percent.

37/7/1 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC
(c) 2007 Institution of Electrical Engineers. All rts. reserv.

09322543 INSPEC Abstract Number: C2005-04-7480-264
Title: Dynamic instrumentation of production systems
Author(s): Cantrill, B.M. ; Shapiro, M.W.; Leventhal, A.H.
Conference Title: Proceedings of the General Track 2004 USENIX Annual
Technical Conference p.15-28
Publisher: USENIX Assoc, Berkeley, CA, USA
Publication Date: 2004 Country of Publication: USA 295 pp.
ISBN: 1 931971 21 8 Material Identity Number: XX-2004-00477
Conference Title: Proceedings of the General Track 2004 USENIX Annual
Technical Conference
Conference Date: 27 June-2 July 2004 Conference Location: Boston, MA,
USA

Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: This paper presents DTrace, a new facility for dynamic instrumentation of production systems. DTrace features the ability to dynamically instrument both user-level and kernel-level software in a unified and absolutely safe fashion. When not explicitly enabled, DTrace has zero probe effect - the system operates exactly as if DTrace were not present at all. DTrace allows for many tens of thousands of instrumentation points, with even the smallest of systems offering on the order of 30,000 such points in the kernel alone. We have developed a C-like high-level control language to describe the predicates and actions at a given point of instrumentation. The language features user-defined variables, including thread-local variables and associative arrays. To eliminate the need for most postprocessing, the facility features a scalable mechanism for aggregating data and a mechanism for speculative tracing. DTrace has been integrated into the Solaris operating system and has been used to find serious systemic performance problems on production systems - problems that could not be found using preexisting facilities. (17 Refs)
subfile: C
Copyright 2005, IEE

37/7/2 (Item 2 from file: 2)
DIALOG(R)File 2:INSPEC
(c) 2007 Institution of Electrical Engineers. All rts. reserv.

06907174 INSPEC Abstract Number: C9806-6150N-036
Title: ThreadMon: a tool for monitoring multithreaded program performance
Author(s): Cantrill, B.M. ; Doeppner, T.W., Jr.
Author Affiliation: SunSoft Inc., Mountain View, CA, USA
Conference Title: Proceedings of the Thirtieth Hawaii International
Conference on System Sciences (Cat. No.97TB100234) Part vol.1 p.
253-65 vol.1
Editor(s): El-Rewini, H.; Patt, Y.N.
Publisher: IEEE Comput. Soc. Press, Los Alamitos, CA, USA
Publication Date: 1997 Country of Publication: USA 6 vol.
(xvii+766+xv+716+620+xiv+546+xiii+720+ix+275) pp.
ISBN: 0 8186 7743 0 Material Identity Number: XX98-00841
U.S. Copyright Clearance Center Code: 1060-3425/97/\$10.00
Conference Title: Proceedings of the Thirtieth Hawaii International
Conference on System Sciences
Conference Sponsor: Univ. Hawaii Coll. Bus. Adm
Conference Date: 7-10 Jan. 1997 Conference Location: Wailea, HI, USA
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: This paper describes ThreadMon, a monitoring tool for improving the performance of multithreaded programs, and how we have used it to

examine various aspects of the many-to-many (or two-level) threads implementation model. We run unmodified binary subject code, insert software probes to collect data, and analyze and present the results in real time on another machine. We show that the behavior of multithreaded programs, particularly those running on multiprocessors, often defies intuition when the many-to-many threads implementation model is used. (13 Refs)

Subfile: c

Copyright 1998, IEE

37/7/3 (Item 1 from file: 56)

DIALOG(R)File 56:Computer and Information Systems Abstracts
(c) 2007 CSA. All rts. reserv.

0000588299 IP ACCESSION NO: 200701-90-000424
HIDDEN in Plain Sight

Cantrill, Bryan
SUN MICROSYSTEM

Queue, v. 4, n 1, p 26-36, Feb. 2006
PUBLICATION DATE: 2006

PUBLISHER: Association for Computing Machinery, Inc., One Astor Plaza, 1515
Broadway, New York, NY, 10036-5701
COUNTRY OF PUBLICATION: USA
PUBLISHER URL: <http://www.acm.org/>
PUBLISHER EMAIL: SIGS@acm.org

DOCUMENT TYPE: Journal Article
RECORD TYPE: Abstract
LANGUAGE: English
ISSN: 1542-7730
FILE SEGMENT: Computer & Information Systems Abstracts
ABSTRACT:

In December 1997, Sun Microsystems had just announced its new flagship machine: a 64-processor symmetric multiprocessor supporting up to 64 gigabytes of memory and thousands of I/O devices. As with any new machine launch, Sun was working feverishly on benchmarks to prove the machine's performance. While the benchmarks were generally impressive, there was one in particular an especially complicated benchmark involving several machines that was exhibiting unexpectedly low performance. The benchmark machine a fully racked-out behemoth with the maximum configuration of 64 processors would occasionally become mysteriously distracted: Benchmark activity would practically cease, but the operating system kernel remained furiously busy. After some number of minutes spent on unknown work, the operating system would suddenly right itself: Benchmark activity would resume at full throttle and run to completion. Those running the benchmark could see that the machine was on course to break the world record, but these minutes-long periods of unknown kernel activity were enough to be the difference between first and worst.

?

File 696:DIALOG Telecom. Newsletters 1995-2007/Mar 05
 (c) 2007 Dialog
 File 9:Business & Industry(R) Jul/1994-2007/Mar 02
 (c) 2007 The Gale Group
 File 15:ABI/Inform(R) 1971-2007/Mar 05
 (c) 2007 ProQuest Info&Learning
 File 98:General Sci Abs 1984-2007/Mar
 (c) 2007 The HW Wilson Co.
 File 484:Periodical Abs Plustext 1986-2007/Feb w3
 (c) 2007 ProQuest
 File 813:PR Newswire 1987-1999/Apr 30
 (c) 1999 PR Newswire Association Inc
 File 613:PR Newswire 1999-2007/Mar 05
 (c) 2007 PR Newswire Association Inc
 File 635:Business Dateline(R) 1985-2007/Mar 03
 (c) 2007 ProQuest Info&Learning
 File 810:Business Wire 1986-1999/Feb 28
 (c) 1999 Business Wire
 File 610:Business Wire 1999-2007/Mar 05
 (c) 2007 Business Wire.
 File 369:New Scientist 1994-2007/Nov w2
 (c) 2007 Reed Business Information Ltd.
 File 370:Science 1996-1999/Jul w3
 (c) 1999 AAAS
 File 16:Gale Group PROMT(R) 1990-2007/Mar 02
 (c) 2007 The Gale Group
 File 47:Gale Group Magazine DB(TM) 1959-2007/Feb 22
 (c) 2007 The Gale group
 File 148:Gale Group Trade & Industry DB 1976-2007/Feb 22
 (c)2007 The Gale Group
 File 160:Gale Group PROMT(R) 1972-1989
 (c) 1999 The Gale Group
 File 275:Gale Group Computer DB(TM) 1983-2007/Mar 02
 (c) 2007 The Gale Group
 File 621:Gale Group New Prod.Annou.(R) 1985-2007/Feb 22
 (c) 2007 The Gale Group
 File 624:McGraw-Hill Publications 1985-2007/Mar 05
 (c) 2007 McGraw-Hill Co. Inc
 File 634:San Jose Mercury Jun 1985-2007/Mar 02
 (c) 2007 San Jose Mercury News
 File 649:Gale Group Newswire ASAP(TM) 2007/Feb 07
 (c) 2007 The Gale Group
 File 636:Gale Group Newsletter DB(TM) 1987-2007/Mar 02
 (c) 2007 The Gale Group
 File 647:CMP Computer Fulltext 1988-2007/May w3
 (c) 2007 CMP Media, LLC
 File 674:Computer News Fulltext 1989-2006/Sep w1
 (c) 2006 IDG Communications

NPL

Full Text

Set	Items	Description
S1	1	AGGID? ?
S2	18339809	AGGREGAT? OR GROUP???? OR BATCH???? OR BUNDL???? OR ASSEMB- L???? OR BUNCH???? OR CLUSTER???? OR AGGROU?
S3	9832532	CATALOG? OR CATEGOR??? OR CLASSIFY? OR CLASSIFIE?? OR CLAS- SIFICATION? OR FAMILY? OR FAMILIES OR TAXONOM?
S4	9963321	ORGANIZ??? OR ORGANIZAT? OR ORGANIS??? OR ORGANISAT? OR CL- USTER????
S5	92838	KERNEL? ?
S6	727710	(TRACE? ? OR TRACING OR PERFORM??? OR PERFORMANCE? OR BEHA- VIOR? OR BEHAVIOUR? OR BEHAV???) (5N) (DATUM OR DATA OR INFORMA- TION)
S7	1923361	(OPERATION?? OR FUNCTION??? OR QUALITY OR RELIAB? OR QOS OR DIAGNOST? OR EVALUAT? OR ASSESS?) (5N) (DATUM OR DATA OR INFOR-

S8 1237771 (ANALYS? OR ANALYT? OR ANALYZ?)(5N)(DATUM OR DATA OR INFORMATION)
 S9 67798 S2:S4(5N)(ABEND? ? OR FAULT? OR DEFECT? OR ANOMAL? OR DEFICIEN?
 S10 57521 S2:S4(5N)(MALFUNCTION? OR INOPERA? OR DYSFUNCT? OR DISFUNCT?
 S11 305466 S2:S4(5N)(CORRUPT? OR DEGRAD? OR EVENT? ? OR BIST OR SELF-EST?
 S12 204524 S2:S4(5N)S6:S8
 S13 2605 S2:S4(5N)S5
 S14 135394 S2:S4(3N)(ID OR IDS OR IDENTIFIER? ? OR TAG? ? OR LABEL????
 S15 151229 (S2:S4 OR CLASS??)(3N)(ID OR IDS OR IDENTIFIER? ? OR TAG? ?
 S16 286704 (S2:S4 OR CLASS??)(3N)(METATAG? OR METAVAlUE? OR INDICIA? ?
 S17 9313994 KEY? ? OR CODE OR CODES
 S18 473259 HASH? OR MESSAGE()DIGEST? OR MESSAGEDIGEST? OR DIGEST? ?
 S19 4478 S14:S16(S)S9:S13
 S20 11291 S14:S16(10N)S17
 S21 219 S19(S)S20
 S22 0 S21(S)S18
 S23 29 S21 AND (S5 OR OS OR OPERATING())SYSTEM? ?)
 S24 1 S21 AND S18
 S25 80 S19 AND S18
 S26 725652 S2:S4(5N)(TRACE? ? OR TRACING OR PERFORM??? OR PERFORMANCE?
 S27 1408837 S2:S4(5N)(OPERATION?? OR FUNCTION??? OR QUALITY OR RELIAB?
 S28 620348 S2:S4(5N)(ANALYS? OR ANALYT? OR ANALYZ?)
 S29 22008 S14:S16(S)S26:S28
 S30 19 S29(S)S18
 S31 12 S29(S)S5
 S32 22 S19(S)S5
 S33 151 (S23:S25 OR S30:S32) NOT S1
 S34 40 S33/2004:2007
 S35 111 S33 NOT S34
 S36 76 RD (unique items)
 S37 0 AU=CANTRILL B?
 S38 1 AU=CANTRILL, B?
 ? t38/3,k

38/3,K/1 (Item 1 from file: 15)
 DIALOG(R)File 15:ABI/Inform(R)
 (c) 2007 ProQuest Info&Learning. All rts. reserv.

03044494 996570761
 Hidden in plain sight
 Cantrill, Bryan
 ACM Queue v4n1 PP: 26 Feb 2006
 ISSN: 1542-7730 JRNL CODE: ACMQ

File 347:JAPIO Dec 1976-2006/Nov(Updated 070228)

(c) 2007 JPO & JAPIO

File 348:EUROPEAN PATENTS 1978-2007/ 200708

(c) 2007 European Patent Office

File 349:PCT FULLTEXT 1979-2007/UB=20070301UT=200:

(c) 2007 WIPO/Thomson

File 350:Derwent WPIX 1963-2006/UD=200715

(c) 2007 The Thomson Corporation

Applicants

Set	Items	Description
S1	6	AU='CANTRILL B':AU='CANTRILL BRYA'
S2	225914	AGGREGAT?
S3	29125	KERNEL?
S4	3	S1 AND S2:S3

4/6/1 (Item 1 from file: 348)

01613119

Method and apparatus for monitoring the performance of a computer system
Verfahren und Vorrichtung zur Leistungsüberwachung eines Rechnersystems
Methode et dispositif de surveillance de la performance d'un systeme
d'ordinateur

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200331	1352
SPEC A	(English)	200331	4811
Total word count - document A			6163
Total word count - document B			0
Total word count - documents A + B			6163

? t4/ti/2-3

4/TI/2 (Item 1 from file: 350)

DIALOG(R)File 350:(c) 2007 The Thomson Corporation. All rts. reserv.

Device driver enabling method, involves exchanging information between
clock system and cyclic system of operating system kernel , and exchanging
information indirectly between cyclic system and processor

Original Titles:

Method and apparatus for arbitrary resolution interval timeouts

4/TI/3 (Item 2 from file: 350)

DIALOG(R)File 350:(c) 2007 The Thomson Corporation. All rts. reserv.

Dynamically allocated memory leak section identification method in computer
system, involves identifying call-site associated with leak section of
memory in response to received operating system failure information

Original Titles:

Method and apparatus for post-mortem kernel memory leak detection



STIC Search Results Feedback Form

EIC 2100

Questions about the scope or the results of the search? Contact *the EIC searcher* or contact:

Alyson Dill, EIC 2100 Team Leader
272-3527, RND 4B28

Voluntary Results Feedback Form

➤ I am an examiner in Workgroup: Example: 2133

➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
(Journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/EIC2100 RND, 4B28

